1004

Access DB# 92634

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Cam Nguyen Examiner #: 74787 Date: 8/6/02
Art Unit: 1754 Phone Number 30 5-3223 Serial Number: _____
Mail Box and Bldg/Room Location: 9B06 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

litigation

6,019,906

No Litigation Required

****

STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher: Mellerson	NA Sequence (#)		STN	
Searcher Phone #: 8-4483	AA Sequence (#)		Dialog	
Searcher Location: CP3/4 3X02	Structure (#)		Questel/Orbit	414.44
Date Searcher Picked Up: 8/6/02	Bibliographic		Dr.Link	
Date Completed: 8/6/02	Litigation	✓	Lexis/Nexis	40.00
Searcher Prep & Review Time: 2	Fulltext		Sequence Systems	
Clerical Prep Time:	Patent Family		WWW/Internet	
Online Time: 6	Other		Other (specify)	

PTO-1590 (8-01)

Mellerson, Kendra

From: Nguyen, Cam
Sent: Tuesday, August 06, 2002 2:20 PM
To: STIC-EIC1700
Subject: Request a litigation search!

Hi,

Please conduct a litigation search on U.S Pat.# 6,019,906.

Thanks,

Cam Nguyen
USPTO Patent Examiner
Tel: 703-305-3923
Cam.Nguyen@uspto.gov

PATNO IS 6019906

DATE: AUGUST 6, 2002
LIBRARY: PATENT
FILE: ALL

Your search request is:
PATNO IS 6019906

Number of PATENTS found with your search request through:
LEVEL 1... 1

Your search request has found 1 PATENT through Level 1.
To DISPLAY this PATENT press either the KWIC, FULL, CITE or SEGMTS key.
To MODIFY your search request, press the M key (for MODFY) and then the ENTER key.

For further explanation, press the H key (for HELP) and then the ENTER key.

LEVEL 1 - 1 PATENT

1. 6019906 , February 1, 2000 , Hard masking method for forming patterned oxygen containing plasma etchable layer , Jang, Syun-Ming, Hsin-chu, TWX; Huang, Ming-Hsin, Hsin-chu, TWX, 00086772, Taiwan Semiconductor Manufacturing Company, Hsin-Chu, TWX

CORE TERMS: layer, microelectronics, patterned, dielectric, plasma, oxygen, fabrication, etchable, mask, blanket ...

LEVEL 1 - 1 OF 1 PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6019906

<=1> GET 1st DRAWING SHEET OF 2

February 1, 2000

Hard masking method for forming patterned oxygen containing plasma etchable layer

REISSUE: February 1, 2002 - Reissue Application filed Ex. Gp.: 1754; Re. S.N. 10/062,314May 14, 2002

APPL-NO: 00086772

FILED-DATE: May 29, 1998

GRANTED-DATE: February 1, 2000

CORE TERMS: layer, microelectronics, patterned, dielectric, plasma, oxygen, fabrication, etchable, mask, blanket ...

ENGLISH-ABST:

A method for forming a patterned microelectronics layer within a microelectronics fabrication. There is first provided a substrate employed within a microelectronics fabrication. There is then formed over the substrate an oxygen containing plasma etchable microelectronics layer. There is then formed upon the oxygen containing plasma etchable microelectronics layer a hard mask layer. There is then formed upon the hard mask layer a patterned photoresist layer. There is then etched through use of a first anisotropic plasma etch method the hard mask layer to form a patterned hard mask layer while employing the patterned photoresist layer as a first etch mask layer. The first anisotropic plasma etch method employs an etchant gas composition appropriate for etching a hard mask material from which is formed the hard mask layer. There is then etched through use of a second plasma etch method the patterned photoresist layer from the patterned hard mask layer while employing the patterned hard mask layer as an etch stop layer while simultaneously etching the

6019906 OR 6,019,906

Your search request has found no CASES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

Current session 06/08/2002

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(C) QUESTEL 1994
QUESTEL.ORBIT (TM) 1998                    06/08/02 21*30*50
Last connection: 06/08/02 16*36*50

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- PlusPat Family w Legal Status in ONE record - INFO MFAMSTAT
- Now 9 million Images w PlusPat displays -  INFO IMG-PLUSPAT
- Latest EP, WO & US Applications in One Alert: INFO APPALERT
- New Trademark file names, format & fields - INFO COMPU-MARK
- EPAPAT contains all unique EPTEXT data. EPTEXT file removed
- New Patent Citation Commands: easy & precise - INFO PATCITE
- USAPPS Reloaded: Pricing, see INFO USAPPS
..FILE / ..INFO / ..GUIDE
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Query/Command : FILE PLUSPAT

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QUESTEL      - Time in minutes :   0,71
The cost estimation below is based on Questel's
standard price list
                              Estimated cost :    0.61 USD
Cost estimated for the last database search :    0.61 USD
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Selected file: PLUSPAT

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Comprehensive Worldwide Patents database
New Patent Citation Commands & FAM Citation Report - see INFO PATCITE
Last update of file: 2002/07/31 (YYYY/MM/DD) 2002-30/UP (basic update)

Search statement   1
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Query/Command : US6019906/PN

**** SS 1: Results 1**

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Search statement   2
```

Query/Command : PRT FULL NONSTOP LEGALALL

1 / 1 PLUSPAT - ©QUESTEL-ORBIT

PN - **US6019906** A 20000201 **[US6019906]**

TI - (A) Hard masking method for forming patterned oxygen containing plasma etchable layer

PA - (A) TAIWAN SEMICONDUCTOR MFG (TW)

IN - (A) HUANG MING-HSIN (TW); JANG SYUN-MING (TW)

AP - US8677298 19980529 [1998US-0086772]

PR - US8677298 19980529 [1998US-0086772]

IC - (A) B44C-001/22 C23F-001/00

EC - H01L-021/311B2B
H01L-021/311D
H01L-021/768B2

PCL - ORIGINAL (O) : 216002000; CROSS-REFERENCE (X) : 216067000 216074000 216075000 216076000 216079000

DT - Basic

CT - US4994402; US5013686; US5162262; US5219788; US5246883; US5256248; US5269879; US5460693; US5472913; US5565384; US5622894; US5654240; US5661344; US5700737; US5721172; US5840624; US5858623

STG - (A) United States patent

AB - A method for forming a patterned microelectronics layer within a microelectronics fabrication. There is first provided a substrate employed within a microelectronics fabrication. There is then formed over the substrate an oxygen containing plasma etchable microelectronics layer. There is then formed upon the oxygen containing plasma etchable microelectronics layer a hard mask layer. There is then formed upon the hard mask layer a patterned photoresist layer. There is then etched through use of a first anisotropic plasma etch method the hard mask layer to form a patterned hard mask layer while employing the patterned photoresist layer as a first etch mask layer. The first anisotropic plasma etch method employs an etchant gas composition appropriate for etching a hard mask material from which is formed the hard mask layer. There is then etched through use of a second plasma etch method the patterned photoresist layer from the patterned hard mask layer while employing the patterned hard mask layer as an etch stop layer while simultaneously etching the oxygen containing plasma etchable microelectronics layer while employing at least the patterned hard mask layer as a second etch mask layer to form a patterned oxygen containing plasma etchable microelectronics layer. The second plasma etch method employs an oxygen containing etchant gas composition. The method is particularly useful for forming patterned oxygen containing plasma etchable microelectronics dielectric layers within microelectronics fabrications.

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1 / 1 LGST - ©LEGSTAT

PN - US 6019906 [US6019906]

AP - US 86772/98 19980529 [1998US-0086772]

DT - US-P

ACT - 19980529 US/AE-A
APPLICATION DATA (PATENT)
US 86772/98 19980529 [1998US-0086772]

20000201 US/A
PATENT

20020514 US/RF
REISSUE APPLICATION FILED
20020201

UP - 2002-22

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1 / 1 CRXX - ©CLAIMS/RRX

PN - 6,019,906 A 20000201 [US6019906]

PA - Taiwan Semiconductor Manufacturing Co TW

ACT - 20020201 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20020514
REISSUE REQUEST NUMBER: 10/062314
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1754

Reissue Patent Number:

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1 / 1 PAST - ©Thomson Derwent

AN - 200220-001733

PN - 6019906 A [US6019906]

OG - 2002-05-14

ACT - REISSUE APPLICATION FILED

Query/Command : FILE INPADOC

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PLUSPAT      - Time in minutes :   1,88
The cost estimation below is based on Questel's
standard price list
                              Estimated cost :    4.13 USD
Records displayed and billed   :      1
                              Estimated cost :    1.10 USD
Cost estimated for the last database search :    5.23 USD
Estimated total session cost                :    5.84 USD

LGST         - Time in minutes :   0,06
The cost estimation below is based on Questel's
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standard price list
                              Estimated cost :    0.06 USD
Records displayed and billed   :      1
                              Estimated cost :    0.57 USD
Legal-Status informations      :      1
                              Estimated cost :    4.92 USD
Cost estimated for the last database search :    5.55 USD
Estimated total session cost                :   11.39 USD

CRXX         - Time in minutes :   0,06
The cost estimation below is based on Questel's
standard price list
                              Estimated cost :    0.09 USD
Records displayed and billed   :      1
                              Estimated cost :    5.00 USD
Legal-Status informations      :      1
                              Estimated cost :    4.92 USD
Cost estimated for the last database search :   10.01 USD
Estimated total session cost                :   21.40 USD

PAST         - Time in minutes :   0,05
The cost estimation below is based on Questel's
standard price list
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Records displayed and billed   :      1
                              Estimated cost :    5.61 USD
Legal-Status informations      :      1
                              Estimated cost :    4.92 USD
Cost estimated for the last database search :   10.62 USD
Estimated total session cost                :   32.02 USD

LITA         - Time in minutes :   0,01
The cost estimation below is based on Questel's
standard price list
                              Estimated cost :    0.01 USD
Cost estimated for the last database search :    0.01 USD
Estimated total session cost                :   32.03 USD

Selected file: INPADOC

You are now connected to INPADOC
Covers 1968/1973 thru weekly updates (2002-31)
For information on content, (..)INFO INPD.

Search statement   1
```

Query/Command : FAM US6019906/PN

```
1 Patent Groups
```

**** SS 1: Results 1**

```
Search statement   2
```

Query/Command : FAMSTATE NONSTOP

1 / 1 INPADOC - ©INPADOC

PN - US 6019906 A 20000201 [US6019906]

TI - HARD MASKING METHOD FOR FORMING PATTERNED OXYGEN CONTAINING PLASMA ETCHABLE LAYER

IN - JANG SYUN-MING [TW]; HUANG MING-HSIN [TW]

PA - TAIWAN SEMICONDUCTOR MFG [TW]

AP - US 86772/98-A 19980529 [1998US-0086772]

PR - US 86772/98-A 19980529 [1998US-0086772]

IC - C23F-001/00; B44C-001/22

1 / 1 LEGALI - ©LEGSTAT

PN - US 6019906 [US6019906]

AP - US 86772/98 19980529 [1998US-0086772]

DT - US-P

ACTE - 19980529 US/AE-A
APPLICATION DATA (PATENT)
US 86772/98 19980529 [1998US-0086772]

20000201 US/A
PATENT

20020514 US/RF
REISSUE APPLICATION FILED
20020201

UP - 2002-22